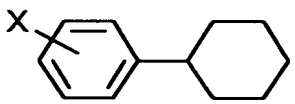
WHAT IS CLAIMED IS:

1. A lithium secondary battery comprising a positive electrode, a negative electrode of artificial graphite or natural graphite and a nonaqueous electrolytic solution having an electrolyte dissolved in a nonaqueous solvent, wherein 0.1 to 20 wt.% of a cyclohexylbenzene having a halogen atom bonded to a benzene ring thereof is contained in the nonaqueous electrolytic solution.

2. The lithium secondary battery of claim 1, wherein the cyclohexylbenzene having a halogen atom bonded to a benzene ring thereof is a compound having the following formula (I):



(I)

wherein X is a halogen atom, and the halogen atom is attached to an optional position.

3. The lithium secondary battery of claim 2, wherein the cyclohexylbenzene having a halogen atom bonded to a benzene ring thereof is 1-halogeno-4-cyclohexylbenzene.

4. The lithium secondary battery of claim 1, wherein the cyclohexylbenzene having a halogen atom bonded to a benzene ring thereof is contained in the nonaqueous electrolytic solution in an amount of 0.5 to 5 wt.%.

5. The lithium secondary battery of claim 1, wherein the nonaqueous solvent of the nonaqueous electrolytic solution comprises a combination of a cyclic car-

bonate and a linear carbonate, a combination of a cyclic carbonate and lactone, or a combination of plural cyclic carbonates and linear carbonates.

6. The lithium secondary battery of claim 1, which contains vinylene carbonate.

7. The lithium secondary battery of claim 1, wherein the artificial graphite or natural graphite has a graphite crystal structure having a lattice distance in terms of d_{002} of lattice surface (002) in the range of 0.335 to 0.340 nm.